

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>			1. CONTRACT ID CODE	PAGE 1 OF 6 PAGES
2. AMENDMENT/MODIFICATION NO. <b>6</b>	3. EFFECTIVE DATE <b>Feb 23, 2009</b>	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)	
6. ISSUED BY NASA Office of Procurement/ DA00 John C. Stennis Space Center Stennis Space Center, MS 39529-6000 Jason Edge (228) 688-2346		7. ADMINISTERED BY (If other than Item 6) <b>Same as block #6</b>		
8. NAME AND ADDRESS OF CONTRACTOR (No. Street, county, State and ZIP: Code)			(✓) 9A. AMENDMENT OF SOLICITATION NO. <b>NNS09272021R</b>	
<b>TO ALL PROSPECTIVE BIDDERS</b>			X 9B. DATED (SEE ITEM 11) <b>November 21, 2008</b>	
			10A. MODIFICATION OF CONTRACT/ORDER NO.	
			10B. DATED (SEE ITEM 13)	
CODE	FACILITY CODE			

## 11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☒ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers \_\_\_ is extended, ☒ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning one (1) copy of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATA SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and data specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

N/A

## 13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(✓) A.	THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
B.	THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
C.	THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
D.	OTHER Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not, ☐ is required to sign this document and return \_\_\_ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SEE PAGE 2 of 6

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		BY (Signature of Contracting Officer)	

The purpose of this amendment is to answer the following contractor questions.

1. The following questions were received, and responses are hereby provided as follows:

**Question 1:** Reference Section 14 21 00 Elevator: The elevator will require additional structural steel and landings which will not be part of the elevator package nor will be known until the Submittals are available. How will this be incorporated in the bid?

**Answer 1:** Once the elevator is selected and submittal drawings are available, NASA will then begin to design the platforms accordingly. Contractor is not to include any provisions for these platforms not currently indicated on the drawings.

**Question 2:** Reference Section 14 21 00 Elevator: Is the elevator enclosure part of this bid? If so, please provide details.

**Answer 2:** The requirements for the elevator car are clearly stated in the specification, the elevator shaft is not enclosed therefore; no elevator enclosure is to be included in your proposal.

**Question 3:** Which of the following items will get coatings and of the items that do, which require coating before delivery?

- a. Pipe Supports
- b. Pipe clamps
- c. All Piping
- d. GFE Tanks
- e. GFE Equipment

**Answer 3:**

- a. Pipe supports to get coatings it is contractor's discretion as to when they are coated.
- b. Most likely these are purchased items from a manufacturer; they will be coated by the manufacturer according to their standard. If they are delivered uncoated, it is the responsibility of the contractor to coat them accordingly.
- c. With the exception of IW piping, most piping is stainless steel and will not require coating. Specification "K2" and "AG" piping will be coated in accordance with the requirements identified in the respective piping specification. Whether these items are coated in the shop before delivery or coated after installation is within the discretion of the contractor.
- d. All GFE tanks will be coated by the tank manufacturer. If the contractor is required to weld or cut a portion of the tank support structure to attach a support, this portion must be re-coated by the contractor according to the tank manufacturer's coating procedure unless approved otherwise by the construction manager.
- e. All GFE equipment will be coated by the equipment manufacturer. If the contractor is required to weld or cut a portion of the equipment support structure to attach a support, this portion must be re-coated by the contractor according to the equipment manufacturer's coating procedure unless approved otherwise by the construction manager.

**Question 4:** Reference 32 31 13 of the Electrical Specification: Is the installation of the fence in this bid? If so where are the details?

**Answer 4:** The fencing details are clearly shown on Drawing 90937- E-712 Unit Substation Fencing Details.

**Question 5:** The 32 GN2 Vessels are part of the GFE list and the foundations are existing. Will they be delivered with the stands that house them? If not please provide details.

**Answer 5:** The vessels will be delivered with the stands that house them. The bottle stands are the same ones that will be used for shipping purposes. The anchor bolts and nuts will be provided by the vessel fabricator. The contractor will be required to install the anchor bolts/nuts for these 32 vessels.

**Question 6:** From the previous questions and answers it was stated that this piping was to be considered in Zone 4A. Please give a brief description of any actual coating or paint that should be applied to the Carbon Steel and Stainless Steel pipe.

**Answer 6:** No coating should be applied to the stainless steel pipe. For the carbon steel pipe, please refer to the requirements identified in NASA STD 5008A.

**Question 7:** Hose Master Expansion Joints-Braided Hoses (From our Vender)

- a) Do we need to design to the operating pressure or the pressure rating?
- b) We will need more information on the EJ's listed as insufficient design data.
- c) What's the anticipated movement that these joins will see and/or some maximum lengths on the EJ's that list TBD.

**Answer 7:**

- a. The operating pressure is given for information pertaining to pressure cycles and fatigue, but the hose must be rated for the "pressure rating" identified.
- b. REV A versions of the data sheets contain sufficient information to purchase Expansion Joints as specified.
- c. REV A versions of the data sheets contain sufficient information to purchase Expansion Joints as specified.

**Question 8:** Per Drawing 90937-S-965: Please provide detail as how the Tolco 1025 PTFE Bearing Pad attaches?

**Answer 8:** Section B-B on S-965 indicates the bearing pads are stitch welded to the structure.

**Question 9:** Please provide design and requirements for the stands supporting vessels V-745-GN, V-746-GN, V-747-GN, and V-748-GN.

**Answer 9:** The overall length of the vessel with support is 10'-6 1/2" X 26 1/8" wide by 2'-8" tall. The support structure is 26 1/8" X 10" with four 1" diameter elongated holes, this occurs at both ends of the vessel, with the top and bottom bolt patterns repeated for stacking of the vessels. This data is for the CPI vessels specified, if or equal vessels are provided the supplier will have to supply this information. See the attached sketch on page 6 of 6 of this Amendment.

**Question 10:** Regarding print page PSK-A3-3006-FAC it indicates providing Purge Panels for the CSG.

How are these to be constructed? Is there a detail drawing Showing the Purge Panels?

**Answer 10:** Purge panels for this system are to be constructed in the same manner as gas panels identified in item 26 of section 1.1 "Summary of Work" in the construction specification 200GT-GM04-REV 1. These panels are to be located immediately downstream of the purge vessels V-745-GN, V-746-GN, V-747-GN, V-748-GN shown on drawings 90937 P-225 and 90937 P-226. There is no detail drawing showing these purge panels.

**Question 11:** There are several components show differing "System Fluid" designators between the data sheets and the P&ID drawings. Please specify which is correct.

Data Sheet Shows	P&ID Drawings Shows
EJ-19A1206-HV	EJ-19A1206-GH
VPV-19A1198-LH	VPV-19A1198-GH
EJ-19A1758-GN	EJ-19A1758-LO
EJ-19A1759-GN	EJ-19A1759-LO

**Answer 11:** The following are the correct designations for each component:

EJ-19A1206-HV  
VPV-19A1198-LH  
EJ-19A1758-GN  
EJ-19A1759-GN

**Question 12:** The following components are shown in the data sheets but aren't shown on the P&ID drawings specified. Please specify where these components are to be installed.

VA-19A1163-GH  
VA-19A1500-LO

**Answer 12:**

- VA-19A1163-GH should not be included in your scope of work.
- VA-19A1500-LO *should have been* the component number for a sample valve located on drawing PSK-A3-2101-FAC zone F-8 in the sample panel box. This valve is installed in the same manner as V-19A1425-LO in the sample panel box on drawing PSK-A3-2100-FAC.

**Question 13:** There are several items that show up on the P&ID drawings with no data sheet to match it. Are these items in the scope of work? If so, please provide the applicable data sheets.

DE-19A1557-NG	PDE-19A1681-IW
DE-19A1558-NG	PDE-19A1685-IW
DL-19A1897-GN	PDE-19A1689-IW
FSV-19A1312-LO	PDE-19A1693-IW
FSV-19A1318-LO	PDE-19A1704-IPA
FSV-19A1319-LO	PDE-19A1707-IPA
PDE-19A1096-LH	PDE-19A1903-GN
PDE-19A1202-LO	PDE-19A2036-HE
PDE-19A1303-LO	PI-19A1812-GN
PDE-19A1348-LO	PI-19A1815-GN
PDE-19A1366-LO	RV-19A1894-GN
PDE-19A1673-IW	VA-19A1203-AC

PDE-19A1677-IW

**Answer 13:** The scope of work for this project does not require the contractor to supply these items.

- DE-19A1557-NG - Not in contractor scope of work to supply.
- DE-19A1558-NG - Not in contractor scope of work to supply.
- DL-19A1897-GN - Not in contractor scope of work to supply
- FSV-19A1312-LO - Not in contractor scope of work to supply
- FSV-19A1318-LO - Not in contractor scope of work to supply
- FSV-19A1319-LO - Not in contractor scope of work to supply
- PDE-19A1096-LH - Not in contractor scope of work to supply
- PDE-19A1202-LO - Not in contractor scope of work to supply
- PDE-19A1303-LO - Not in contractor scope of work to supply
- PDE-19A1348-LO - Not in contractor scope of work to supply
- PDE-19A1366-LO - Not in contractor scope of work to supply
- PDE-19A1673-IW - Not in contractor scope of work to supply
- PDE-19A1677-IW - Not in contractor scope of work to supply
- PDE-19A1681-IW - Not in contractor scope of work to supply
- PDE-19A1685-IW - Not in contractor scope of work to supply
- PDE-19A1689-IW - Not in contractor scope of work to supply
- PDE-19A1693-IW - Not in contractor scope of work to supply
- PDE-19A1704-IPA - Not in contractor scope of work to supply
- PDE-19A1707-IPA - Not in contractor scope of work to supply
- PDE-19A1903-GN - Not in contractor scope of work to supply
- PDE-19A2036-HE - Not in contractor scope of work to supply
- PI-19A1812-GN - Not in contractor scope of work to supply
- PI-19A1815-GN - Not in contractor scope of work to supply
- RV-19A1894-GN - Not in contractor scope of work to supply
- VA-19A1203-AC - Not in contractor scope of work to supply

2. All other terms and conditions remain the same.

